

**Amendments to the Claims:**

This listing of claims will replace all prior version, and listings, of claims in the application:

**Listing of Claims:**

1-17 (canceled).

18. (New) A control method for managing a transmission capacity of at least one relay station of a transmission system, the control method comprising:

detecting traffic to be transmitted by at least two transmitting stations; and  
coordinating transmission of the traffic to be transmitted with consideration of traffic already coordinated before within a specified time window and a frequency range allowed for the transmission of the traffic to be transmitted;

wherein the traffic to be coordinated is composed at least of traffic contributions to be transmitted in a store and forward mode whose traffic volume is defined by a duration of the traffic contribution and a required bandwidth of the traffic contribution, and

wherein the coordinating is performed so that within an area of a frequency-time diagram defined by the allowed specified time window and the allowed frequency range the area of the traffic contributions is maximized by shifting contributions to be transmitted in the store and forward mode within the frequency-time diagram and by coordinating the transmitting stations with each other;

wherein the transmission system includes the at least two transmitting stations, at least one receiving station, and a control unit for coordinating the at least one transmitting station, the at least one relay station and the at least one receiving station, wherein a respective one of the transmitting stations provides for transmission of at least one type of traffic to be transmitted in the store and forward mode, a respective receiving station receives the at least one type of traffic to be transmitted in the store and forward mode, and a respective relay station routes the at least one type of traffic to be transmitted in the store and forward mode from the transmitting station to the receiving station, and wherein the control unit coordinating the same performs the control method.

19. (New) The method of claim 18, further comprising:

discriminating the types of traffic in the traffic to be transmitted;  
determining the type of transmission for the respective traffic in response to the

discriminated type of traffic; and

transmitting the traffic in the determined type of transmission from the respective at least one transmitting station via the at least one relay station to the respective at least one receiving station.

20. (New) The method of claim 19, wherein the discriminating is performed by an identification denoting the type of traffic of the respective traffic.

21. (New) The method of claim 19, wherein the discriminating is performed by an input interface denoting the type of traffic of the respective traffic at which the traffic is input.

22. (New) The method of claim 18, wherein the coordinating of the traffic contributions is based on the priority of the traffic contributions.

23. (New) The method of claim 22, wherein traffic contributions manually input by an operator are prioritized over real-time contributions which have priority over store and forward contributions.

24. (New) The method of claim 23, wherein within the store and forward contributions, the prioritization is performed according to size so that within the store and forward contributions the largest traffic contributions to be transmitted are coordinated first.

25. (New) The method of claim 23, wherein the traffic contributions manually input by an operator and the real-time contributions occupy a fixed partial area within an area of a frequency-time diagram.

26. (New) A control unit for managing a transmission capacity of at least one relay station of a transmission system, the control unit comprising:

a detecting arrangement to detect traffic to be transmitted;

a coordinating arrangement to coordinate the transmission of the traffic to be transmitted with consideration of traffic already coordinated before within a specified time window and frequency range allowed for the transmission of the traffic to be transmitted, wherein the traffic to be coordinated includes at least of traffic contributions to be transmitted in a store and forward mode whose traffic volume is defined by a duration of the traffic contribution and a required bandwidth of the traffic contribution, and wherein the

coordinating is performed so that within an area of a frequency-time diagram defined by the allowed specified time window and the allowed frequency range the area of the traffic contributions is maximized by shifting contributions to be transmitted in the store and forward mode within the frequency-time diagram; and

a control arrangement to control, in response to an output of the coordinating arrangement, a coordinated transmission of the traffic from a respective one of at least two transmitting stations via the at least one relay station to a respective one of at least one receiving station and to coordinate the transmitting stations with each other;

wherein the transmission system includes the at least two transmitting stations, and the at least one receiving station, wherein the respective transmitting station provides for transmission of at least one type of traffic to be transmitted in the store and forward mode, the respective receiving station receives the at least one type of traffic to be transmitted in the store and forward mode, and the respective relay station routes the at least one type of traffic to be transmitted in the store and forward mode from the transmitting station to the receiving station.

27. (New) The control unit of claim 26, further comprising:

a discriminating arrangement to discriminate the types of traffic in the traffic to be transmitted; and

a determining arrangement to determine the type of transmission for the respective traffic in response to the discriminated type of traffic.

28. (New) The control unit of claim 27, wherein the discriminating arrangement discriminates by an identification denoting the type of traffic of the respective traffic.

29. (New) The control unit of claim 27, wherein the discriminating arrangement discriminates by an input interface denoting the type of traffic of the respective traffic at which the traffic is input.

30. (New) The control unit of claim 26, wherein the coordinating arrangement coordinates the traffic contributions by the priority of the traffic contributions.

31. (New) The control unit of claim 30, wherein traffic contributions manually input by an operator are prioritized over real-time contributions which have priority over store and forward contributions.
32. (New) The control unit of claim 31, wherein within the store and forward contributions, the prioritization is performed according to size so that within the store and forward contributions the largest traffic contributions to be transmitted are coordinated first.
33. (New) The control unit of claim 31, wherein the traffic contributions manually input by an operator and the real-time contributions occupy a fixed partial area within the area of a frequency-time diagram.
34. (New) A transmission system comprising:
- at least two transmitting stations;
  - at least one relay station;
  - at least one receiving station, wherein a respective one of the transmitting stations provides for transmission of at least one type of traffic to be transmitted in the store and forward mode, a respective receiving station receives the at least one type of traffic to be transmitted in the store and forward mode, and a respective relay station routes the at least one type of traffic to be transmitted in the store and forward mode from the transmitting station to the receiving station; and
  - a control unit for managing a transmission capacity of the at least one relay station of the transmission system, the control unit including:
    - a detecting arrangement to detect traffic to be transmitted;
    - a coordinating arrangement to coordinate the transmission of the traffic to be transmitted with consideration of traffic already coordinated before within a specified time window and frequency range allowed for the transmission of the traffic to be transmitted, wherein the traffic to be coordinated includes at least of traffic contributions to be transmitted in a store and forward mode whose traffic volume is defined by a duration of the traffic contribution and a required bandwidth of the traffic contribution, and wherein the coordinating is performed so that within an area of a frequency-time diagram defined by the allowed specified time window and the allowed frequency range the area of the traffic contributions is maximized by shifting contributions to be transmitted in the store and forward mode within the frequency-

'time diagram; and

a control arrangement to control, in response to an output of the coordinating arrangement, a coordinated transmission of the traffic from the respective one of at least two transmitting stations via the at least one relay station to the respective one of at least one receiving station and to coordinate the transmitting stations with each other.